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| OBLON SPIX | 7590 03/28/200 /AK MCCLELLAND | 8 MAIER & NEUSTADT, P.C. | EXAM | INER | |
| 1940 DUKE S | TREET | BOYKIN, TI | BOYKIN, TERRESSA M | | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com oblonpat@oblon.com jgardner@oblon.com

Office Action Summary

| Application No. | Applicant(s) | Applicant(s) | | |
|--------------------|-----------------|--------------|--|--|
| 10/577,954 | SCHULTES ET AL. | | | |
| Examiner | Art Unit | | | |
| Terressa M. Boykin | 1796 | | | |

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| | | Terressa M. Boykin | 1796 | |
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| Period fo | The MAILING DATE of this communication app | ears on the cover sheet with the c | orrespondence ad | ldress |
| A SH WHIC - Exte after - If NC - Failu Any | ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING D. A STATE AND A STA | TE OF THIS COMMUNICATION 6(a). In no event, however, may a reply be tin ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | N. nely filed the mailing date of this o D (35 U.S.C. § 133). | , |
| Status | | | | |
| 2a)□ | Responsive to communication(s) filed on <u>02 M</u> . This action is FINAL . 2b) This Since this application is in condition for allowan closed in accordance with the practice under <u>E</u> . | action is non-final. ce except for formal matters, pro | | e merits is |
| Disposit | ion of Claims | | | |
| 5)□ 6)⊠ 7)□ | Claim(s) <u>1-20</u> is/are pending in the application. 4a) Of the above claim(s) is/are withdraw Claim(s) is/are allowed. Claim(s) <u>1-20</u> is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/or | | | |
| Applicat | ion Papers | | | |
| 10)□ | The specification is objected to by the Examiner The drawing(s) filed onis/are: a) accept Applicant may not request that any objection to the c Replacement drawing sheet(s) including the correct The oath or de | epted or b) objected to by the I drawing(s) be held in abeyance. See on is required if the drawing(s) is obj | e 37 CFR 1.85(a). jected to. See 37 CF | |
| Priority (| under 35 U.S.C. § 119 | | | |
| a) | Acknowledgment is made of a claim for foreign All b | s have been received. s have been received in Applicati ity documents have been received (PCT Rule 17.2(a)). | on No ed in this National | Stage |
| Attachmen | ut(s) ce of References Cited (PTO-892) | 4) Interview Summary | (PTO-413) | |

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO/S5/05) Paper No(s)/Mail Date 03-12-08:08-02-06.

Paper No(s)/Mail Date. 5) Notice of Informal Patent Application

6) Other:



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Claim Rejections - 35 USC § 112

Claims 1-15, 19 and 20 are rejected under 35 U.S.C. 112, second paragraph, as

being indefinite for failing to particularly point out and distinctly claim the subject matter

which applicant regards as the invention.

Applicants states in claim 1 that the claimed moiety is a multilayered film. However

as written it can be interpreted or construed as having one continuous constitution

which is contradictory of the recited term "multilavered. Note for example:

a) methacrylate copolymerwith the polycarbonate of the backing layer

b) ...identical or different methacrylate....

c) ...up to 30%of the layers a) and b)

If applicants are intending to claim a multilayer film then each a) b) and c) moiety

must be clearly distinguishable from the other in order to use the term "multilayer.

However, if it is not necessary that the layers be distinguishable the term 'multilayer

should not be used and would thus bring into question the whether or not the

specification is enabling and/or commensurate in scope.

* It is understood that moiety a) contains a light stabilizer, while b) contains a dye, such is not

distinguishable since applicant(s) comprising" in each instance, i.e. a) and b) is open language and does

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not exclude either of the additional moieties etc. disclosed herein. Thus, both a) and b) and c) may contain therein a dve and a light stabilizer.

Claim Rejections - 35 USC § 102/ 35 USC 103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.
Patentability shall not be negatived by the manner in which the invention was made.

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Claims rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over USPub 20020054991 note pages 1-10.

USPub 20020054991 discloses a thermoplastic resin film satisfactory in printability wherein the thermoplastic resin film which is characterized by having on a surface thereof a hydroxy-modified imine polymer containing repeating units represented by the following general formula (I) in an amount of 5 mol % or more based on the total of repeating units:

$$(I)$$

$$+ (CR^{2}R^{2})_{m} + (COH)R^{5}_{l} + (CR^{6}R^{7})_{j} + (COH)R^{6}_{lk}R^{9}$$

(in the formula, R^1 and R^2 are each independently a hydrogen atom, or a straight chain or branched alkyl group within the range of 1 to 10 carbon atoms, an alkyl group having an alicyclic structure or an aryl group, $R^{3\theta}$ are each independently a hydrogen atom, or an alkyl group within the range of 1 to 20 carbon atoms, a cycloslkyl group, an aryl group, an aralkyl group, an alkylaryl group, groups each alternately forming bonds to form a cyclic structure, an alkyloxyalkyl group having a straight chain, branched or alicyclic structure within the range of 1 to 20 carbon atoms, an alkylaryloxyalkyl group, a hydroxyalkyl group having a straight chain, branched or alicyclic structure within the range of 1 to 20 carbon atoms or an aryl group-containing hydroxyalkyl group, h is an integer ranging from 0 to 4, k is an integer ranging from 0 to 4, k is an integer ranging from 0 to 4, k is an integer ranging from 0 to 6.)

Thermoplastic resins used include polyolefin resins such as ethylene resins such as high density polyethylene and intermediate density polyethylene, polypropylene resins, polymethyl-1-pentene resins or ethylene-cyclic olefin copolymers, polyamide resins such as nylon-6, nylon-6, nylon-6, 10 and nylon-6, 12, thermoplastic polyester resins such as polyethylene terephthalate and its copolymers, polyethylene naphthalate and aliphatic polyesters, and thermoplastic resins such as polycarbonates, atactic polystyrene, syndiotactic polystyrene, polymethyl methacrylate, polyvinyl chloride.

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polyvinylidene chloride, ethylene-vinyl chloride copolymers and polyphenylene sulfide. They can also be used as a mixture of two or more of them.

When the fine inorganic powder contained in the base material layer of the singlelayer structure or the multi-layer structure exceeds 60% by weight, a stretched resin film is liable to break in transverse stretching performed after longitudinal stretching. When the fine inorganic powder contained in the surface layer exceeds 75% by weight, the surface strength of the surface layer after transverse stretching is low, resulting in material fracture of the surface layer in color development of printing ink.

When the thermoplastic resin film is the polyolefin resin film, as the organic filler, there is used one having a melting point (for example, from 170 to 300.degree. C.) or a glass transition temperature (for example, from 170 to 280, degree, C.) higher than the melting point of the polyolefin resin, such as polyethylene terephthalate, polybutylene terephthalate, a polycarbonate, nylon-6, nylon-6,6, nylon-6,12 or a cyclic olefin polymer. When the thermoplastic resin film is the polyolefin resin film and the single layer, and contains the organic filler, it contains usually 50 to 99.5% by weight of the polyolefin resin and 50 to 0.5% by weight of the organic filler, and preferably 60 to 97% by weight of the polyolefin resin and 40 to 3% by weight of the organic filler. When the thermoplastic resin film is the multi-layer structure and the base material layer and the surface layer contain the organic filler, usually, the base material layer contains 50 to 99.5% by weight of the polyolefin resin and 50 to 0.5% by weight of the organic filler, and the surface layer contains 35 to 100% by weight of the polyolefin resin and 65 to 0% by weight of the organic filler. Preferably, the base material layer contains 60 to 97% by weight of the polyolefin resin and 40 to 3% by weight of the organic filler, and the surface layer contains 40 to 97% by weight of the polyolefin resin and 60 to 3% by weight of the organic filler.

The above is an example of where applicant's claims may be interpreted to overlap or render obvious applicants invention.

A stabilizer, a light stabilizer, a dispersing agent, a lubricant, etc. may be further mixed therewith as needed. As the stabilizer, there may be mixed a stabilizer of the steric hindrance phenol family, the phosphorus family, the amine family, etc. in an amount of 0.001 to 1% by weight. As the light stabilizer, there may be mixed a light stabilizer of a steric hindrance amine, the benzotriazole family, the benzophenone family, etc. in an amount of 0.001 to 1% by weight. As the dispersing agent for the fine inorganic powder, there may be mixed, for example, a silane coupling agent, a higher fatty acid such as oleic acid or stearic acid, metal soap, polyacrylic acid, polymethacrylic acid or a salt thereof in an amount of 0.01 to 4% by weight.

Specific examples of the monomers of the above-mentioned (a') can be obtained, for example, by modifying tertiary amine-containing monomers represented by the following general formula (VI), such as dimethylaminoethyl acrylate, diethylaminoethyl acrylate,

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methacrylate-corresponding compounds thereof, dimethylaminopropylacrylamide, methacrylate-corresponding compounds thereof, etc., with modifying agents represented by the following general formula (VII), such as 3-chloro-2-hydroxypropyltrimethylammonium chloride, etc., before or after polymerization. The hydrophobic monomer units of the above-mentioned component (b) include alkyl (meth)acrylates such as methyl (meth) acrylate, ethyl (meth) acrylate, butyl (meth) acrylate, isobutyl (meth) acrylate, tertiary butyl (meth) acrylate, cyclohexyl (meth) acrylate, 2-ethylhexyl (meth) acrylate, lauryl (meth) acrylate, dodecyl (meth) acrylate and stearyl (meth) acrylate.

A pattern was offset printed on the resulting base material resin film with Dia OF-4 (Kikuyonsai) manufactured by Mitsubishi Heavy Industries, Ltd., using oxidation polymerization type ink for synthetic paper four colors of black, cyan, magenda and yellow), and the density of transferred ink was measured. Further, for the transfer state of ink on the whole face, it was visually observed whether there was poor transfer such as coating streaks and blank areas or not, and the ink transfer was evaluated according to the following five grades:

Claim 1 of the reference discloses:

A thermoplastic resin film having on a surface thereof a hydroxy-modified imine polymer containing repeating units represented by the following general formula (i) in an amount of 5 mol % or more based on the total of repeating units: 20wherein R¹ and R² are each independently a hydrogen atom, or a straight chain or branched alkyl group within the range of 1 to 10 carbon atoms, an alkyl group having an alicyclic structure or an aryl group, R³ are each independently a hydrogen atom, or an alkyl group within the range of 1 to 20 carbon atoms, a cycloalkyl group, an aryl group, an aralkyl group, an alkylaryl group, groups each alternately forming bonds to form a cyclic structure, an alkyloxyalkyl group having a straight chain, branched or alicyclic structure within the range of 1 to 20 carbon atoms, an alkylaryloxyalkyl group, a hydroxyalkyl group having a straight chain, branched or alicyclic structure within the range of 1 to 20 carbon atoms or an aryl group-containing hydroxyalkyl group, an arileger ranging from 0 to 4, k is an integer ranging from 0 to 4 and m is an integer ranging from 0 to 4 and m is an integer ranging from 0 to 4 and m is an integer ranging from 0 to 4 and m is

The reference **USPub 20020054991** discloses a film prepared from the same components as claimed by applicants, and depending on the *optional component* of the claim, the film may be interpreted as disclosing one continuous film except for the particular amount of polycarbonate and methacrylates as claimed albeit the amounts do overlap. With regard to the recited "test specimen.....tensile strain at break (ISO 527-2) at 100° calculated as a relative value..." it is noted that any properties or characteristics inherent in the prior art, although unobserved or detected by the reference, would still

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anticipate the claimed invention. Note In re Swinehart, 169 USPQ 226. "It is elementary that the mere recitation of a newly discovered...property,

inherently possessed by things in the prior art, does not cause claim drawn to those things to distinguish over the prior art". Further, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ particular amounts as known in the art, or in this particular instance the % amount by weight since it is well-established that merely selecting proportions and ranges is not patentable absent a showing of criticality. In re Becket, 33 U.S.P.Q. 33 (C.C.P.A. 1937). In re Russell, 439 F.2d 1228, 169 U.S.P.Q. 426 (C.C.P.A. 1971). Generally, it is prima facie obvious to determine workable or optimal values within a prior art disclosure through the application of routine experimentation. See In re Aller, 105 USPQ 233, 235 (CCPA 1955); In re Boesch, 205 USPQ 215 (CCPA 1980); and In re Peterson, 315 F.3d 1325 (CA Fed 2003). Since the disclosed amounts are expressed differently, i.e. % percent by weight, and thus may be distinct from those claimed, it is incumbent upon applicant(s) to establish that they are in fact different and whether such difference is unobvious. In view of the above, there appears to be no significant difference between the reference and that which is claimed by applicant(s). Consequently, the claimed invention cannot be deemed as novel or unobvious and accordingly is unpatentable.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Terressa M. Boykin whose telephone number is 571

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272-1069. The examiner can normally be reached on Monday-Thursday 10-5:30 Friday (work at home).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Terressa M. Boykin/ Primary Examiner, Art Unit 1796